

ABSTRACT OF THE INVENTION

The invention provides a method of increasing the extent of a desired biaxial orientation of a previously formed non-single-crystal structure by contacting said structure with an oblique particle beam thereby forming in the structure a nucleating surface having increased desired
5 biaxial orientation. The method can further include a step of epitaxially growing the crystalline formation using the nucleating surface to promote the epitaxial growth. The invention also provides a crystalline structure containing a nucleating surface formed by contacting a previously formed non-single-crystal structure with an oblique particle beam, from
10 0 to 10 adjacent orientation-transmitting layers, and a crystalline active layer. In this structure, the active layer is oriented in registry with the nucleating surface.